

Amendments to the Claims

1. (Amended) In a data transmission system employing hybrid automatic retry request (HARQ), a method for transmitting data to multiple users over a single data channel, the method comprising the steps of:

~~selecting a user that owns a current time slot based on a status of each individual user's queue;~~

communicating ownership of the time slot to the user that owns the current time slot over a Forward Dedicated Control Channel (F-DCH);

~~communicating an first and/or a second channel state to the user;~~

communicating a per user stop-and wait ARQ channel identifier to the user over the F-DCH; and

~~performing HARQ transmission to the user over the data channel based on the status of each individual user's queue and the channel state~~

transmitting data over the single data channel.

2. – 3. (cancelled)

4. (Amended) In a data transmission system employing hybrid automatic retry request (HARQ), an apparatus comprising:

a plurality of source transmitters each performing HARQ transmissions to a plurality of destination devices over a single data channel, the plurality of source transmitters comprising:

a first HARQ transmitter;

a second HARQ transmitter coupled to the first HARQ transmitter; and

a system scheduler that selects a user that owns a current time slot, based on a status of each individual user's queue communicates ownership of the time slot to the user over a Forward Dedicated Control Channel (F-DCH), communicates a per user stop-and wait ARQ channel identifier to the user over the F-DCH and performs HARQ transmission via the first or the second HARQ transmitter to a destination device over the single data channel based on a status of each individual user's queue and a channel state.

5. (original): The apparatus of claim 4 wherein the system scheduler selects the user that owns the current time slot based on a combined queue.

6. (original): The apparatus of claim 4 wherein the first HARQ transmitter is an odd HARQ transmitter, the second HARQ transmitter is an even HARQ transmitter, and HARQ transmission via the first or the second HARQ transmitters takes place via the odd or the even HARQ transmitter.

7. (currently amended): In a data transmission system employing hybrid automatic retry request (HARQ), an apparatus comprising:

means for selecting a user that owns a current time slot based on a status of each individual user's queue;

means for communicating ownership of the time slot to the user that owns the current time slot over a Forward Dedicated Control Channel (F-DCH);

means for communicating a per user stop-and wait ARQ channel identifier to the user over the F-DCH ~~an even or an odd channel state to the user;~~

means for transmitting data over a single data channel performing HARQ ~~transmission to the user over the data channel based on the status of each individual user's queue and the channel state.~~

8. (new): The method of claim 1 wherein the step of transmitting data over a single data channel comprises transmitting data over a forward shared channel (F-SCH).

9. (new): The method of claim 8 wherein transmitting data over a forward shared channel comprises transmitting data over a forward shared channel that uses one of a plurality of modulation and coding schemes.

10. (new): The method of claim 1 further comprising communicating a per-user abort indicator over the Forward Dedicated Control Channel (F-DCH) prior to transmitting over the single data channel.

11. (new): The method of claim 1 further comprising communicating a per-user modulation and coding scheme over the Forward Dedicated Control Channel (F-DCH) prior to transmitting over the single data channel.

12. (new): The method of claim 1 further comprising communicating a per-user code rate assignment over the Forward Dedicated Control Channel (F-DCH) prior to transmitting over the single data channel.

13. (new): The method of claim 12 wherein communicating a per-user code rate assignment over the Forward Dedicated Control Channel (F-DCH) comprises communicating a per-user Walsh-Hadamard code.

14. (new): The method of claim 1 wherein selecting a user that owns a current time slot is based on a status of each individual user's queue.

15. (new): The method of claim 1 wherein a modulation and coding scheme for transmitting data over a data channel is based on an average link quality

16. (new): The apparatus of claim 4 wherein the system scheduler selects the user that owns the current time slot based on a status of each individual user's queue.